

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave. St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 70.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002691**Date Inspected:** 22-May-2008**Project Name:** SAS Superstructure**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Contractor:** Japan Steel Works**OSM Arrival Time:** 830**OSM Departure Time:** 1930**Location:** Muroran, Japan**CWI Name:** Chung Kuan**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower, Jacking and Deviation Saddles**Summary of Items Observed:**

The following report is based on METS observations at Japan Steel Works (JSW) in Muroran Japan. Current work: Casting, machining and nondestructive testing of Saddles.

Fabrication Building number 4

At 1000 hours, the Caltrans Quality Assurance (QA) inspector arrived at JSW fabrication shop number 4 and observed a procedure qualification test designated SW-3 performed by JWS welding personnel Mr. Kouzou Kabayashi. The welding was performed utilizing the gas shielded flux cored arc welding process in the Flat (1G) position. The base material appeared to be 50mm thick ASTM A709M Grade 345T. The filler metal electrode appeared to be brand name Tri Mark TM-55E70t-5CJ-H4. The welding was performed per the AWS D1.5, 2002 Section 5.13 requirements. The Intertek QC inspector Mr. Chung Kuan recorded the preheat and interpass temperatures, the average amperage, voltage and the travel speed for all weld passes completed on this date. The QA inspector observed that the welder Mr. Kouzou Kabayashi ground each weld pass to smooth bright finish prior to starting the next weld pass. After welding of the third pass, the QA inspector observed that the welding travel speed was 18 percent above the previous passes. The QA inspector informed the QC inspector, Mr. Kuan that the travel speed exceeded the allowable 10 percent variation in accordance with the contract special provisions section 8-3.01 Welding. Mr. Kuan elected to allow the welding of this test plate to continue. The welding of this plate was not completed on this date. The QA inspector noted that the welding did not appear to meet the minimum requirements of AWS D1.5-2002 and the contract documents.

The QA inspector observed other work in progress in Fabrication building 4. for One JSW welding personnel was

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

performing welding on the temporary welds to attach the base block to West Deviation Saddle W2E1 and one JSW welding personnel was performing welding on the base block for West Deviation Saddle W2E2.



Summary of Conversations:

On this date the QA inspector attended a meeting at Japan Steel Works Muroran facility. The QA inspector and METS personnel Mr. Ron Brasel met with JSW personnel Mr. Hiroshi Iga, General Manager and Mr. Kazunori Sato, Deputy Manager.

The requirements of the contract special provisions section 8-3.01 'Welding' requirements for fillet weld soundness test requirements and the specific test requirements of AWS D1.5-2002 were discussed.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Venkatesh Iyer, (858) 967-6363, who represents the Office of Structural Materials for your project.

Inspected By:	Lanz,Joe	Quality Assurance Inspector
Reviewed By:	Brasel,Ron	QA Reviewer
